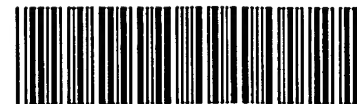


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/539,627
Source: 1F40
Date Processed by STIC: 2/27/06

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/539,627

TIME: 12:22:21

Input Set : A:\US10539627-seq list.txt

Output Set: N:\CRF4\02272006\J539627.raw

4 <110> APPLICANT: IPF PharmaCeuticals GmbH
 6 <120> TITLE OF INVENTION: Peptides and their use for the treatment of HIV
 7 infections
 9 <130> FILE REFERENCE: 032873wo ME/BM
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/539,627
 C--> 12 <141> CURRENT FILING DATE: 2005-06-17
 14 <150> PRIOR APPLICATION NUMBER: 02028465.9
 15 <151> PRIOR FILING DATE: 2002-12-19
 17 <160> NUMBER OF SEQ ID NOS: 88
 19 <170> SOFTWARE: PatentIn Ver. 2.1
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 20
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Homo sapiens
 26 <400> SEQUENCE: 1
 27 Leu Glu Ala Ile Pro Met Ser Ile Pro Pro Glu Val Lys Phe Asn Lys
 28 1 5 10 15
 30 Pro Phe Val Phe
 31 20
 34 <210> SEQ ID NO: 2
 35 <211> LENGTH: 20
 36 <212> TYPE: PRT
 37 <213> ORGANISM: Artificial Sequence
 39 <220> FEATURE:
 40 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-121
 42 <220> FEATURE:
 43 <221> NAME/KEY: MUTAGEN
 44 <222> LOCATION: (10)
 45 <223> OTHER INFORMATION: Xaa is D-proline
 47 <400> SEQUENCE: 2
 W--> 48 Leu Glu Ala Ile Pro Met Ser Ile Pro Xaa Glu Val Ala Phe Asn Lys
 49 1 5 10 15
 51 Pro Phe Val Phe
 52 20
 55 <210> SEQ ID NO: 3
 56 <211> LENGTH: 20
 57 <212> TYPE: PRT
 58 <213> ORGANISM: Artificial Sequence
 60 <220> FEATURE:
 61 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-161
 63 <220> FEATURE:
 64 <221> NAME/KEY: VARIANT
 65 <222> LOCATION: (10)

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RAW SEQUENCE LISTING

DATE: 02/27/2006

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TIME: 12:22:21

Input Set : A:\US10539627-seq list.txt

Output Set: N:\CRF4\02272006\J539627.raw

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66 <223> OTHER INFORMATION: Xaa is D-proline
68 <400> SEQUENCE: 3
W--> 69 Leu Glu Ala Ile Pro Cys Ser Ile Pro Xaa Cys Val Ala Phe Asn Lys
70      1              5              10              15
72 Pro Phe Val Phe
73      20
76 <210> SEQ ID NO: 4
77 <211> LENGTH: 20
78 <212> TYPE: PRT
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-162
84 <400> SEQUENCE: 4
85 Leu Glu Ala Ile Pro Cys Ser Ile Pro Pro Cys Val Gly Phe Gly Lys
86      1              5              10              15
88 Pro Phe Val Phe
89      20
92 <210> SEQ ID NO: 5
93 <211> LENGTH: 20
94 <212> TYPE: PRT
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-163
100 <400> SEQUENCE: 5
101 Leu Glu Ala Ile Pro Cys Ser Ile Pro Pro Cys Val Leu Phe Asn Lys
102      1              5              10              15
104 Pro Phe Val Phe
105      20
108 <210> SEQ ID NO: 6
109 <211> LENGTH: 20
110 <212> TYPE: PRT
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-164
116 <400> SEQUENCE: 6
117 Leu Glu Ala Ile Pro Cys Ser Ile Pro Pro Cys Val Phe Phe Asn Lys
118      1              5              10              15
120 Pro Phe Val Phe
121      20
124 <210> SEQ ID NO: 7
125 <211> LENGTH: 20
126 <212> TYPE: PRT
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-165
132 <400> SEQUENCE: 7
133 Leu Glu Ala Ile Pro Cys Ser Ile Pro Pro Cys Phe Ala Phe Asn Lys
134      1              5              10              15
136 Pro Phe Val Phe

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RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/539,627

TIME: 12:22:21

Input Set : A:\US10539627-seq list.txt

Output Set: N:\CRF4\02272006\J539627.raw

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137          20
140 <210> SEQ ID NO: 8
141 <211> LENGTH: 21
142 <212> TYPE: PRT
143 <213> ORGANISM: Artificial Sequence
145 <220> FEATURE:
146 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-166
148 <220> FEATURE:
149 <221> NAME/KEY: MUTAGEN
150 <222> LOCATION: (14)
151 <223> OTHER INFORMATION: Xaa is D-Tic
153 <220> FEATURE:
154 <221> NAME/KEY: MUTAGEN
155 <222> LOCATION: (18)
156 <223> OTHER INFORMATION: Xaa is D-Tic
158 <400> SEQUENCE: 8
W--> 159 Leu Glu Ala Ile Pro Cys Ser Ile Pro Pro Cys Val Ala Xaa Asn Lys
160      1          5          10          15
162 Pro Xaa Phe Val Phe
163          20
166 <210> SEQ ID NO: 9
167 <211> LENGTH: 20
168 <212> TYPE: PRT
169 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-170
174 <400> SEQUENCE: 9
175 Leu Glu Ala Ile Pro Met Ser Ile Pro Pro Glu Val Phe Phe Gly Lys
176      1          5          10          15
178 Pro Phe Val Phe
179          20
182 <210> SEQ ID NO: 10
183 <211> LENGTH: 20
184 <212> TYPE: PRT
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-175
190 <400> SEQUENCE: 10
191 Leu Glu Ala Ile Pro Met Ser Ile Pro Pro Glu Phe Leu Phe Gly Lys
192      1          5          10          15
194 Pro Phe Val Phe
195          20
198 <210> SEQ ID NO: 11
199 <211> LENGTH: 20
200 <212> TYPE: PRT
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-182
206 <400> SEQUENCE: 11

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RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/539,627

TIME: 12:22:21

Input Set : A:\US10539627-seq list.txt

Output Set: N:\CRF4\02272006\J539627.raw

```

207 Leu Glu Ala Ile Pro Met Ser Ile Pro Pro Glu Leu Ala Phe Ala Lys
208   1               5               10               15
210 Pro Phe Val Phe
211           20
214 <210> SEQ ID NO: 12
215 <211> LENGTH: 20
216 <212> TYPE: PRT
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-184
222 <400> SEQUENCE: 12
223 Leu Glu Ala Ile Pro Met Ser Ile Pro Pro Glu Ile Ala Phe Asn Lys
224   1               5               10               15
226 Pro Phe Val Phe
227           20
230 <210> SEQ ID NO: 13
231 <211> LENGTH: 20
232 <212> TYPE: PRT
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-190
238 <220> FEATURE:
239 <221> NAME/KEY: MUTAGEN
240 <222> LOCATION: (10)
241 <223> OTHER INFORMATION: Xaa is D-proline
243 <400> SEQUENCE: 13
W--> 244 Leu Glu Ala Ile Pro Met Ser Ile Pro Xaa Glu Val Gly Phe Gly Lys
245   1               5               10               15
247 Pro Phe Val Phe
248           20
251 <210> SEQ ID NO: 14
252 <211> LENGTH: 20
253 <212> TYPE: PRT
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-191
259 <220> FEATURE:
260 <221> NAME/KEY: MUTAGEN
261 <222> LOCATION: (10)
262 <223> OTHER INFORMATION: Xaa is D-proline
264 <400> SEQUENCE: 14
W--> 265 Leu Glu Ala Ile Pro Met Ser Ile Pro Xaa Glu Val Leu Phe Gly Lys
266   1               5               10               15
268 Pro Phe Val Phe
269           20
272 <210> SEQ ID NO: 15
273 <211> LENGTH: 20
274 <212> TYPE: PRT
275 <213> ORGANISM: Artificial Sequence

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RAW SEQUENCE LISTING

DATE: 02/27/2006

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TIME: 12:22:21

Input Set : A:\US10539627-seq list.txt

Output Set: N:\CRF4\02272006\J539627.raw

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277 <220> FEATURE:
278 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-192
280 <220> FEATURE:
281 <221> NAME/KEY: MUTAGEN
282 <222> LOCATION: (10)
283 <223> OTHER INFORMATION: Xaa is D-proline
285 <400> SEQUENCE: 15
W--> 286 Leu Glu Ala Ile Pro Met Ser Ile Pro Xaa Glu Val Phe Phe Gly Lys
      287   1             5             10             15
      289 Pro Phe Val Phe
      290             20
293 <210> SEQ ID NO: 16
294 <211> LENGTH: 20
295 <212> TYPE: PRT
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-193
301 <220> FEATURE:
302 <221> NAME/KEY: MUTAGEN
303 <222> LOCATION: (10)
304 <223> OTHER INFORMATION: Xaa is D-proline
306 <400> SEQUENCE: 16
W--> 307 Leu Glu Ala Ile Pro Met Ser Ile Pro Xaa Glu Phe Ala Phe Asn Lys
      308   1             5             10             15
      310 Pro Phe Val Phe
      311             20
314 <210> SEQ ID NO: 17
315 <211> LENGTH: 20
316 <212> TYPE: PRT
317 <213> ORGANISM: Artificial Sequence
319 <220> FEATURE:
320 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-197
322 <220> FEATURE:
323 <221> NAME/KEY: MUTAGEN
324 <222> LOCATION: (10)
325 <223> OTHER INFORMATION: Xaa is a D-proline
327 <400> SEQUENCE: 17
W--> 328 Leu Glu Ala Ile Pro Met Ser Ile Pro Xaa Glu Val Phe Phe Asn Lys
      329   1             5             10             15
      331 Pro Phe Val Phe
      332             20
335 <210> SEQ ID NO: 18
336 <211> LENGTH: 20
337 <212> TYPE: PRT
338 <213> ORGANISM: Artificial Sequence
340 <220> FEATURE:
341 <223> OTHER INFORMATION: Description of Artificial Sequence: VIR-199
343 <220> FEATURE:
344 <221> NAME/KEY: MUTAGEN

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/539,627

DATE: 02/27/2006
TIME: 12:22:22

Input Set : A:\US10539627-seq list.txt
Output Set: N:\CRF4\02272006\J539627.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 10
Seq#:3; Xaa Pos. 10
Seq#:8; Xaa Pos. 14, 18
Seq#:13; Xaa Pos. 10
Seq#:14; Xaa Pos. 10
Seq#:15; Xaa Pos. 10
Seq#:16; Xaa Pos. 10
Seq#:17; Xaa Pos. 10
Seq#:18; Xaa Pos. 10
Seq#:19; Xaa Pos. 10
Seq#:20; Xaa Pos. 10
Seq#:22; Xaa Pos. 10
Seq#:23; Xaa Pos. 10
Seq#:24; Xaa Pos. 10, 13
Seq#:25; Xaa Pos. 10, 12
Seq#:26; Xaa Pos. 10, 12
Seq#:27; Xaa Pos. 10, 13
Seq#:28; Xaa Pos. 10, 12
Seq#:29; Xaa Pos. 10, 13
Seq#:30; Xaa Pos. 10, 13
Seq#:31; Xaa Pos. 10, 13
Seq#:32; Xaa Pos. 10, 13
Seq#:33; Xaa Pos. 10
Seq#:34; Xaa Pos. 10, 17
Seq#:35; Xaa Pos. 10, 17
Seq#:42; Xaa Pos. 10
Seq#:43; Xaa Pos. 10
Seq#:44; Xaa Pos. 10
Seq#:45; Xaa Pos. 10
Seq#:46; Xaa Pos. 10
Seq#:47; Xaa Pos. 10
Seq#:48; Xaa Pos. 10
Seq#:52; Xaa Pos. 10
Seq#:53; Xaa Pos. 10
Seq#:54; Xaa Pos. 10
Seq#:55; Xaa Pos. 10
Seq#:56; Xaa Pos. 10
Seq#:57; Xaa Pos. 10
Seq#:58; Xaa Pos. 10
Seq#:60; Xaa Pos. 10
Seq#:61; Xaa Pos. 10
Seq#:62; Xaa Pos. 10
Seq#:63; Xaa Pos. 10
Seq#:64; Xaa Pos. 10

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/539,627

DATE: 02/27/2006
TIME: 12:22:22

Input Set : A:\US10539627-seq list.txt
Output Set: N:\CRF4\02272006\J539627.raw

Seq#:65; Xaa Pos. 10
Seq#:66; Xaa Pos. 10
Seq#:67; Xaa Pos. 10
Seq#:68; Xaa Pos. 10
Seq#:69; Xaa Pos. 10
Seq#:70; Xaa Pos. 10,14
Seq#:71; Xaa Pos. 10,17

VERIFICATION SUMMARY

DATE: 02/27/2006

PATENT APPLICATION: US/10/539,627

TIME: 12:22:22

Input Set : A:\US10539627-seq list.txt

Output Set: N:\CRF4\02272006\J539627.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:48 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:69 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
M:341 Repeated in SeqNo=8
L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:449 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:501 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:657 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:683 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
M:341 Repeated in SeqNo=34
L:756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
M:341 Repeated in SeqNo=35
L:873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:915 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:936 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:957 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0
L:978 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:1068 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0
L:1089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0
L:1110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:0
L:1131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0
L:1152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
L:1173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0
L:1194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0
L:1231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
L:1252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:1273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0
L:1294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/539,627

DATE: 02/27/2006

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Input Set : A:\US10539627-seq list.txt

Output Set: N:\CRF4\02272006\J539627.raw

L:1315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0
L:1336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0
L:1357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0
L:1378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:0